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ORIGINAL COMMUNICATIONS.

CASES OF PARALYSIS OF THE FIFTH CRANIAL NERVE.

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THE rarity of trifacial paralysis is shown by the following statistics: Among four thousand one hundred and sixty-nine cases of eye-disease treated at the Eye and Ear Institute of Philadelphia, from February 1, 1870, to February 1, 1875, were three cases of trifacial paralysis. In the Fifth Report of the New York Ophthalmic and Aural Institute, for the twenty months ending December 31, 1874, there is a record of five thousand five hundred and seventy cases of eye-disease, and among them but one case of trifacial paralysis, under the head of neuro-paralytic keratitis. In the report of Wills Ophthalmic Hospital for the year 1874, among three thousand eight hundred and nine cases of eye-disease I find no case of paralysis of the fifth cranial nerve. I have not included the ear-cases treated at two of the above-named institutions, although I might fairly do so, as in the five cases of trifacial paralysis (two occurring under my own observation, and the remainder in the practice of Prof. Noyes, of New York, and Prof. Norris, of Philadelphia) to which reference will be made in this paper the hearing on the paralyzed side was markedly impaired in all save one, in which the lesion was anterior to the Gasserian ganglion.

It is superfluous to prove, as might readily be done, that cases of trifacial paralysis are far more likely to present themselves at a dispensary for the treatment of eye- and ear-diseases than anywhere else: indeed, it is extremely probable that some of the cases are seen at more than one such institution, making their frequency apparently greater than it really is. The cases of trifacial paralysis which I have collected, although few in number, are extremely instructive, from the fact that they afford instances of lesion both behind and in front of the Gasserian ganglion.

The following case of *paralysis of the fifth and seventh cranial nerves, with impairment of muscular co-ordination*, seems to me of sufficient interest to warrant its being presented in detail to the readers of the *Medical Times*:

H. W., æt. 35, cabin steward, came to the Eye and Ear Institute on August 22, 1871, and gave the following history. Nineteen months before, he was attacked with right facial paralysis. The attack occurred during the night while he was on shore, the vessel on which he was employed being in port, and his attention was first called to it by one of his shipmates as he was going on board the next morning. It cannot be ascertained whether there was any impairment of sensation in the right half of the face at that time. Previous to the attack he had enjoyed good health, with the exception of occasional attacks of headache and vertigo.

About twenty years ago, he says, he had a bubo which suppurred and discharged, but there is no trace of a cicatrix in either groin. On each side of the neck, about four inches below the mastoid process, are two pucker'd cicatrices; the patient says the glands suppurred in 1858, and were lanced. The crests of the tibiae are slightly roughened. The man has three children, who are healthy, according to his account, and his wife has had one miscarriage, caused by fright. Eleven months ago (*i.e.*, before August 22, 1871) the right eye began to show signs of inflammation, and has continued in a state of subacute inflammation ever since. The cornea, in its lower half, is cloudy, and near its outer border is a small ulcer; there is neither pain nor photophobia, and the cornea and conjunctiva can be touched with the finger or probe without annoying the patient in the least. After the instillation of atropia, oblique illumination brings into view several posterior synechiae. The lens-capsule is opaque, so that the retinal vessels, which are said to be enlarged in cases of paralysis of the fifth nerve, cannot be seen. In the right eye $V = \frac{1}{16}$; in the left eye $V = 1$.

The paralysis of the right trifacial is far from complete, but sensation is equally impaired in those regions to which its different branches are distributed.

The paralysis of the facial nerve is evident at a glance. The mouth is drawn to the left side; the uvula points to the left, and the velum is abnormally flaccid; the patient complains that it seems to "get across" his throat at times. He cannot close the right eye; the strongest effort approximates the lids to within a quarter of an inch of each other. The lids are not closely and evenly applied to the ball, as in health, and are very easily everted.

The sense of taste is decidedly impaired. I tested it by placing a small quantity of sulphate of quinia upon the right side of the tongue, and mixing it thoroughly with the saliva; the patient did not perceive it until, in the act of swallowing, it passed over the base of the tongue and impressed the nerve-filaments of the glosso-pharyngeal.

It is a question how much the loss of this special sense depends upon paralysis of the fifth, and how much upon that of the seventh, for, as is well known, in paralysis of the seventh of one side the sense of taste is impaired on the corresponding side. This is supposed to be owing to paralysis of the chorda tympani which accompanies the lingual branch of the fifth.

The sense of smell does not seem to be impaired, and the Schneiderian mucous membrane presents nothing abnormal so far as can be seen. The sense of hearing in the right ear is completely abolished. The membrana tympani is perforated, and there are signs of former inflammation of the middle ear. There is constant tinnitus. At present the patient is suffering from supra-orbital neuralgia.

What chiefly troubles him, however, is not the affection of the eye, nor the paralysis of the face, with its attendant deformity, nor the supra-orbital neuralgia, but a certain unsteadiness of gait during the day, which, after dark, amounts to staggering. This has been so great as to cause him to be suspected of drunkenness and dismissed by his employer. On closing his eyes and keeping his legs close together, he stands firmly, and can even walk a few steps with the eyes closed without staggering. He cannot walk steadily along a narrow passage without touching the wall with one of his hands, nor can he go up-stairs readily without touching the banisters. This, he declares, is not to support himself, but merely as a guide, and he says that if a cord were stretched above the stairs, he could ascend steadily by merely touching it with one finger. This was not put to the proof. In this case it would

appear that the deficiency in co-ordination is supplied by the special sense of touch, instead of by the sense of sight, as is most commonly observed. The impairment of the sense of sight may serve to account for this substitution.

The treatment consisted in faradization of the facial muscles, and the internal use of hydrarg. chlorid. corrosiv., gr. one-sixteenth, and potass. iodid., gr. x, thrice daily. The zygomatic and risorius muscles were the only ones that responded to the current, and those but feebly.

September 5.—The corneal ulcer has disappeared, and with a strong effort the lids can be approximated to within one line of each other.

September 13.—H. W. has obtained employment as cook in a restaurant, where his kitchen consists of a narrow passage about three feet by twelve, along which he moves without difficulty and without using his hands to guide himself.

My last notes of the case are dated October 27, at which time the staggering was so slight as to be of no inconvenience; the whole cornea was clear, and the man's general health greatly improved; the mouth was still twisted to the left side.

During a connection of four years with the Eye and Ear Institute I have seen but one other case similar to this. In it there was the same insensibility of the cornea and right side of the face, and a very unsteady gait. The right facial nerve was also paralyzed. There was, however, an undoubted history of syphilis. The attack came on after exposure to cold. The man was thrown out of a sleigh while on a drunken frolic, and lay in the snow the greater part of the night.

In a paper entitled "Paralysis of the Fifth Cerebral Nerve and its Effects," read before the New York Academy of Medicine (*N. Y. Med. Record*, July 15, 1871) by Prof. Henry D. Noyes, the history of two cases is given in detail. The first case occurred in a man *aet.* 33, without syphilitic taint. The fifth and seventh nerves of the right side were paralyzed, and the senses of taste, smell, and hearing much impaired. The membrana tympani was intact and transparent. There was at first occasional giddiness, which increased as the case progressed to a fatal termination. The cornea sloughed away entirely. A cancerous tumor had been removed from the lip before the patient came under the observation of Prof. Noyes; this ultimately recurred in the cicatrix, and destroyed the patient. There was no autopsy.

In Case II. the paralysis was limited to the two superior branches of the fifth, and the affection of the eye was very severe. Perforation of the cornea seemed imminent, and there was hypopion. Recovery took place under the use of electricity, atropia, and warm fomentations.

In the Transactions of the American Ophthalmological Society for 1871 is the report of a case by Prof. William F. Norris, of Philadelphia, in which there was neuro-paralytic ophthalmia of the left eye which proceeded to perforation of the cornea. There was slight paralysis of the left facial, and marked deafness of the same side, also impairment of the sense of taste. There was a large epithelioma at the left angle of the mouth. The case ran a rapid course to a fatal termination, its whole duration

occupying less than two months. At about the end of the first month dizziness and staggering occurred. There was no autopsy.

In the two cases which I have observed, the lesion was central, involving, probably, the deep origin of the fifth, the superficial origin of the seventh, and irritating or compressing the cerebellum. The affection of the eye was subacute, and, with the exception of the anaesthesia, may be, perhaps, fully accounted for by the paralysis of the orbicularis muscle. This is shown by the fact that, in the case which I have given in detail, the keratitis disappeared as this muscle regained its power, although the anaesthesia remained. In the two cases in which the lesion was probably a rapidly-growing tumor, as evidenced by their progressive nature and the appearance of epithelioma externally, the Gasserian ganglion was probably involved, and the eye-affection was very destructive. The most instructive case in this point of view is the one reported by Prof. Noyes, in which the lesion was *undoubtedly* in front of the Gasserian ganglion, as shown by the fact that the inferior branch of the nerve was unaffected, and here the eye-affection was very acute and threatening, and would have proceeded to complete destruction of the ball had not the cause of the disease been removed by treatment.

In concluding, I would call attention to the remarkable analogy between the effect of alcohol upon the nervous system and some of the symptoms presented by the above-mentioned cases. One of the earliest effects of alcohol is paralysis of the fifth pair, evidenced by numbness of the lips (Anstie, "Stimulants and Narcotics," p. 188), while it is needless to mention the unsteadiness of gait produced by that agent.

The fibres of origin of the fifth pair have been shown by anatomists to enter the cerebellum, "spreading out on the surface of its middle peduncle" (Gray's Anatomy), so that the observation of Anstie of the paralyzing action of alcohol upon the trifacial nerve lends weight to the theory that the species of locomotor ataxia produced by this drug is due to a toxæmia of the cerebellum. These considerations have induced me to attribute the disorders of muscular co-ordination which occur, so far as I know, invariably in connection with central paralysis of the fifth cranial nerve, to a lesion of the cerebellum.

INFLAMMATION AND ULCERATION OF THE APPENDIX OF THE CÆCUM, PRODUCED BY AN ORANGE-SEED, THE CAUSE OF FATAL PERITONITIS.

BY S. C. THORNTON, M.D.

ON Tuesday, June 30, 1874, I found E. C. B., 19 years of age, in bed, complaining of continued pain in the hypogastrium, which had already lasted two days. Suspecting that he had colic, I gave him three grains of calomel and half a grain of morphia, and directed warm fomentations over the whole abdomen, and another half-grain of morphia to be exhibited in six hours if required.

The second dose of morphia was taken at 12 P.M. He rested well after it till 5 A.M., but after this the pains

became constant and more and more intense, so that at my second visit (July 1) they were unbearable. Another half-grain of morphia was given, with two large tablespoonfuls of castor oil. An hour afterwards he had an alvine passage. One-half grain of the morphia was directed to be given every four or six hours till he rested well.

Thursday, 9 A.M., I found him much worse. His pulse had been 108, but was now 140, and feeble. Skin cool, and covered with a profuse perspiration. Pain extended into the thorax. Abdomen hard and painful, but not much swollen. A terebinthinate stupe was applied over the whole abdomen, and morphia directed to be given as before.

3 P.M.—In addition to the other symptoms of yesterday, there was vomiting of bile.

11 P.M.—He was in a collapse. Directed the medicines to be discontinued.

Friday, 5 A.M., he died.

Drs. E. P. Townsend and A. W. Taylor, of Beverly, took part in the post-mortem.

The whole peritoneum—parietal and reflected—was found inflamed. In addition to the characteristic bright-red color, the apposed surfaces were firmly agglutinated by exudation. There was also in the abdomen a copious serous effusion, having a milky appearance from the large number of fibrinous flocculi in it. The peritoneum covering the convex surface of the liver was covered with coagulable lymph; that covering the stomach, mesentery, and bladder was free.

A careful examination of the appendix revealed an ulcerated opening, into which Dr. Townsend readily passed the handle of the scalpel.

In the right iliac fossa Dr. Taylor found a substance which he suspected had escaped from the gut. This, apparently, was a scybala of the size of a black-heart cherry. After washing it, Dr. Townsend and Dr. Taylor inclined to the opinion that it was a biliary calculus, but, on close examination, an orange-seed was found to be the nucleus of the mass. The appendix was only two and five-eighths inches in length, but augmented to three-fourths of an inch in thickness.

The calculus made its exit equidistant from the two extremities of the appendix. An adhesive inflammation must have followed the destroyer, for all communication between it and the cæcum was obliterated. And yet to the last it retained its fecal covering. The gall-bladder was distended, full of bile, but free from calculi.

REMARKS.—An interesting feature of this case was that during many months the patient had complained of much pain in his right hip, which was often increased by riding and sometimes relieved by walking. Was this pathognomonic of cæcitis, of inflammation of the appendix, or of both?

NOTES OF HOSPITAL PRACTICE.

CHARITY HOSPITAL, BLACKWELL'S ISLAND, NEW YORK.

CLINICAL SERVICE OF F. R. STURGIS, M.D.,

Lecturer on Venereal Diseases in the Medical Department of the University of the City of New York, etc., etc.

SYPHILITIC ECTHYMA.

GENTLEMEN,—I have three interesting cases to show you to-day of so-called syphilitic ecthyma. I shall exhibit the three together for the purpose of comparison, as they are really three different stages of the

same lesion. Before showing them, however, permit me to say a few words in regard to the nature of these lesions. In the books, you know, the pustular syphilides are divided into acne, impetigo, and ecthyma syphilitica. This is, to a certain extent, a bad nomenclature; and I would suggest, in place of it, that we adopt a name which describes the characteristics of the lesion and its cause. These lesions really begin as a pustule; and if we call them pustulo-crustaceous and pustulo-ulcerous, we describe not only the pathology of these lesions, but the cause as well.

To begin with the first case. She can assign no date for the time of the primary lesion; nor does she remember to have seen any evidence of syphilis previous to her present trouble. Nine weeks ago she noticed reddish spots appearing upon her back; these came out also on her hand; in a short time they became pustular, broke, and scabbed. For the last three weeks she has noticed that her hair came out while combing it. From the appearance of the eruption, the lesion is one which would generally be classed under the head of the tertiary rather than the secondary stage; though, as regards this point, the dividing line between these two stages is very vague and ill defined. An ecthyma may occur as an early as well as a late symptom. The correct division would be into superficial and deep,—those which appear in the early stage of the disease being superficial, the deep ones being the late lesions. You notice in this patient the different stages that the eruption goes through. Here the red discoloration of the skin becoming rapidly changed into a pustule, the pustule becomes ulcerated, and the ulcer is covered with a crust. If we remove one of these crusts, you will see that the ulcer beneath is superficial.

The rest of the lesion in this case is upon the back, the hand, and the scalp, although it is by no means confined to these localities. It may be present upon other portions of the body, but affecting chiefly the lower extremities and the back.

In the second case, on the other hand, you notice a different condition of things. The lesion is not so copious; the crust covering the ulcer is a great deal thicker, and you see that it is surrounded, in a more marked degree than in the first case, with a dusky-red border or areola, which extends for some distance beyond the crust. In stripping off this latter, you notice that it is quite tenacious; and upon exposing the ulcer beneath we find that, although superficial, it is deeper than it was in the preceding case. We have here an advanced stage of the same process, in which the first stage was a pustule; this became slightly ulcerated and covered with a soft crust; as the disease progressed, the ulcer became deeper, and the crust thicker and more adherent. We also notice that the suppuration is more abundant, and that bleeding occurs after detachment of the crust.

In this second case, the history is briefly that about four years ago she contracted a sore, followed by an enlargement of each groin, neither of which supplicated. One year following, she had a squamous eruption. Two years ago she had an ulcer on each leg; and about eight months ago, a pustular eruption, similar to the present one, came out upon her arms and legs. About March 1 she noticed reddish spots on her chin, which extended upward towards her lips. These were at first hard, but subsequently ulcerated, especially at the corners of the mouth. Three weeks ago a new eruption appeared upon her back. You notice in the history of the case that there has probably been a relapse. Earlier lesions are much more likely to relapse than the late ones, and when this occurs the symptoms often assume the same character as the preceding lesion. Let me call your attention to one point, to wit, the lapsing of the sound skin over the edges of the crust. This

occurs from the ulcer extending beneath the skin farther than appears at first sight; in other words, the skin is undermined, and the secretion coagulating on exposure to the air, along the edges of the undermined skin, gives the crust the appearance of being embedded in the tissues beneath. If we examine the crust closely, we see that it is elevated above the surrounding skin, is convex, and thinner in the centre than at the edges, differing from a "rupial" crust, which is thicker at the apex than at the edges. This is due to the ulcer in the latter case being deeper and having more sharply-cut edges; whereas in "ectyma" the ulcer is more superficial and the edges are on a higher plane than is the centre.

Let us look at the third case. Here, upon the breast, the crust is decidedly thicker and higher than in the other two; and on removing it you see that the ulcer beneath has begun to granulate. In these advanced cases the edges of the ulceration are undermined and steep, looking as though they were punched out; there is, therefore, a decided loss of tissue. The suppuration here is more abundant than in the other two cases, and the crust correspondingly thicker. As these ulcerations heal, granulations (as you see) spring up from the floor of the ulcer; the sides contract, and, after a time, cicatrization is perfect. The resulting scar is of a dead white color, resembling somewhat a burn, and depressed below the surrounding skin. You see here upon the shoulders such scars left from old by-gone ulcers.

Can we draw from these cases any idea as to the character of the primary lesion which preceded? Not always; but sometimes we can. In those cases where the subsequent symptoms take on ulcerative action, we may assume that there has also been ulceration of the primary lesion. This point was investigated by M. Bassereau, a French physician, and he found that where the chancre was phagedænic the subsequent lesions were apt to assume an ulcerated character, and *vice versa*. This arises, I am inclined to believe, from the patient's condition, which, bad from the beginning, induces ulceration, not only in the chancre, but in all the other lesions.

A word with regard to the date of the appearance of these lesions. In the books, you know, they are described as being those which occur at the late stage of the disease. Undoubtedly true; at the same time these symptoms may and do occur at an early stage of the syphilis, differing from the late lesions in that the ulceration is superficial as compared with the latter. I therefore think that the more correct division would be into superficial and deep, rather than the chronological one of secondary and tertiary.

As regards the diagnosis, the history will often be of more importance than the appearance of the lesions themselves. Paradoxical as it may seem, there is nothing absolutely pathognomonic in the appearance of the lesions of syphilis whereby on inspection you will be able to say of two given lesions, this one is syphilis and that one is not. Even the peculiar copper-color which is so often insisted upon in the books as peculiar to syphilis, you will find in eruptions which have nothing to do with the disease: so that one of the main points which has been borrowed from the old writers is really of less importance than was at first supposed. There is one point, however, which is of value; and that is the greater tendency which the syphilitic eruptions have to ulcerate and break down than the non-syphilitic ones; but even on this point you must not lay too much stress. The later lesions are not only an expression of disease being still present, but they are usually associated with a vitiated condition of the system. You notice the difference in the physical appearance of the three women. In the first case the woman looked ruddy and strong. In the second case the difference between

her and the first was marked: she looked pale and weak; while in the third the difference was still more marked: she had a wan, cachectic look. The difficulty is not so much in curing the lesions as in getting the patients up to their former condition. The disease is from the very commencement constitutional; is one that taxes the energies of the patient from beginning to end; *serious, from what it may result in, for, however superficial the primary lesion may be, you cannot tell absolutely whether tertiary lesions will not supervene.* It is very necessary, therefore, to treat your patient well from the start; to prevent, if possible, the appearance of late lesions.

In respect to the treatment, it is twofold,—specific and tonic. By specific treatment is meant treatment with mercury and iodide of potassium. Of late years there have been quite warm discussions as to the relative value of these two remedies, some contending that mercury, if not actually injurious, is at least inferior to the iodide. This I believe to be a mistake; and the profession at large are coming to regard mercury as the safer and surer agent in the treatment of syphilis. You must not, however, limit yourself to any special mode of treatment, but adopt that which appears most fitted to the case in hand.

Let us study the treatment of these late lesions. It is in these cases that the iodide of potassium has been especially extolled, and not without reason; it is undoubtedly of benefit. But you will often find that after the iodide of potassium has been given for some time the symptoms will not improve beyond a certain point, but will remain stationary. If, now, mercury be added to the treatment, the patient gets well. I have therefore come to regard the iodide of potassium in these cases as the adjunct, and not as the main agent in the treatment. There are two methods of giving mercury, —externally and internally. Of these two, much may be said for the external method. One reason why it has not been so much used in this country, particularly in private practice, is that patients object to the soiling of their linen; but that may be obviated by using the same underclothes while the treatment is going on. It has the advantage of leaving the stomach entirely free, and the less that is disturbed with medicine the better. In these cases you must remember to build your patient up; reserve the stomach for food, and the skin for the specific treatment. It is surprising to see how the mercury will be absorbed, if the inunction is properly administered. Remember that in these lesions you have a serious condition of things. Ulceration, sometimes deep, is present; this, perhaps, extends; the disease progresses; important organs are threatened; the bones and viscera are attacked, and when this happens it very often becomes a nearly hopeless affair. Suppose the alimentary canal is attacked; of course your patient will not assimilate his food; tonics are of little use, and, push your treatment as far as you please, your patient will not recover; he falls into a condition of marasmus, and perhaps dies. Fortunately, however, few cases go so far as this. A great deal of the bad name that mercury has received is due to its improper use; and many practitioners, uncertain of its action and fearful of doing harm, give it in a very hesitating and doubtful manner. If you are going to give it in that way you had better not give it at all; much better depend upon the iodide of potassium. If you give mercury, give it in full doses, and, where occasion requires, freely. It is surprising to see how much mercury your patient will tolerate. Rub in half a drachm of the ointment to begin with, and increase it up to one or two drachms, if the patient will stand the dose. You will then find that the lesion will go away, where a smaller quantity would have no effect. Although I advise you to be bold in your treatment, I do not intend you to be

rash. Watch your patient; observe the effect of the treatment; see if the lesions disappear; and should any untoward symptoms, such as salivation, stomatitis, or diarrhoea, supervene, suspend the use of the mercury at once. There are various other methods for its external use,—viz., by baths, fumigation, and hypodermic injection. They present no special advantages over inunction, and many disadvantages; so that, although useful in some cases, they do not need more than a passing notice here.

Internal treatment is principally with the bichloride of mercury, the protiodide of mercury, and blue mass, with or without tonics; and of these the former is the one most frequently used. Many who use it speak well of it. Personally, I am sorry to say, I cannot do so. In my hands I have found it liable to produce the toxic effects speedily, and is not capable of being pushed to any great extent. One of my favorite ways of giving mercury by the mouth is to use the blue pill (*massa hydrargyri*) in connection with quinine or iron. The formula I use is two grains of the mercurial to one grain of the tonic, in pill form; one, two, or three to be given three times daily, p. r. n. In this way of giving it the mineral is rapidly absorbed, and very seldom disturbs either the mouth or the bowels. This I give more especially in the early stages of the disease. I wish to direct your attention for a moment to the use of the quinine and iron. From the commencement, in the early as well as in the late stages, the red blood-corpuscles are notably altered in number and quality. From the very beginning, syphilis is a blood-disease, so that a tonic, in addition to the specific treatment, becomes an essential. Do not, because you know the value of mercury and iodine in the treatment of syphilis, underrate the advantage to be derived from the use of tonics. You must always bear in mind that the patient is to be sustained in general health and strength, as well as cured of his syphilis.

Another preparation of frequent use is the protiodide of mercury, given alone, or combined with conium or opium. The usual dose is from one-half grain to one grain, daily, either in a single or divided dose. It is usually given in conjunction with the iodide of potassium, under the name of the mixed treatment. With regard to the iodide of potassium, the same rule is to be followed as in the administration of mercury,—*give it freely*. The great mistake that nine practitioners in ten make, is to give a dose of iodide of potassium in from three to five grains. This is too little; the patient will stand the iodide well; his disease very often imperatively requires it. Begin, therefore, with ten grains, and from that run it up until your patient cannot stand any more, or until the symptoms yield. The moment that occurs, stop the remedy. It sounds like an enormous dose, but in this hospital I have run patients up to over five hundred grains a day, with the effect of relieving their symptoms, when with less no result was obtained. Thus, you see, this remedy can be pushed to a great extent; and if, in the deep lesions of the bones and other organs, you give only a small dose of ten or twenty grains, the disease, so to speak, laughs at it. Give a dose of forty grains or more, and the symptoms vanish. Be cautious, then, with whatever drug you use; do not give it rashly, but do not hesitate to employ it freely.

With regard to tonic treatment, you must remember that in these late cases there is very decidedly-marked cachexia, and that it must be your duty to overcome, so far as possible. Build up your patient, then, with good food, stimulants, and tonics. The mercury will second the action of the tonic,—indeed, will itself act as a tonic.

TRANSLATIONS.

DIAGNOSIS AND TREATMENT OF NEURALGIAS.—Pitha (*Allgem. Wien. Med. Zeitung*, No. 1, 1875, et seq.), who has himself been a victim of various neuralgic symptoms following purulent infection, gives some curious experiences relative to his various subjective symptoms.

Neuralgia of the base of the bladder gave the impression of a calculus; the sharp projections could be felt against the mucous membrane, and on movement the stone was perceived to strike against the pubic symphysis. Examination by means of a sound showed the absence of any calculus, and the characteristic symptoms disappeared gradually from this time.

Neuralgia of the heel gave the impression of a subperiosteal separation of bone; instruments scraping and operating in this locality were also felt, though no bone-trouble was present.

The various forms of neuralgia from which Pitha suffered seemed central in their origin, and defied all therapeutics.

He has therefore had recourse to injections of morphia, which method of using the drug seems the most desirable. He suggests that the remedy should at first be used in the smallest doses; these not to be given in rapid succession, and only gradually to be increased, since the narcotic effect is cumulative.

Certain individuals, particularly those suffering from cardiac weakness, have such an idiosyncasy against morphia that even the smallest doses are sufficient to bring on the most marked toxic symptoms,—deathly pallor, cold sweats, intermission of the pulse and respiration, protracted nausea, and vomiting. Chloroform and chloral hydrate seem to act similarly on such persons; the author therefore urges the greatest caution in giving the first dose, and also as regards avoidance of veins.

In case of poisoning, he counsels fresh air, affusion with vinegar and cold water, enemata of strong coffee, and, if necessary, artificial respiration. If the symptoms persist, Pitha suggests the trial of chloroform inhalations. Against the disagreeable effects of morphia on the intestinal canal, Pitha suggests the use of muriate of quinia in coffee, and occasionally one one-hundredth grain injection of sulph. atropia. By long use of morphia these symptoms disappear, as does also the persistent but not disagreeable sleeplessness. He has never observed any evil psychical effect from these injections. The injection should not be made near the affected part. Pitha has devised an instrument for painless injections in which the fine needle-point is suddenly thrust under the skin by a spring. Patients should never be trusted with hypodermic syringes.—*Centralblatt*, No. 18, 1875.

X.

CONGENITAL LUXATION OF THE KNEE.—Dr. Dubrisay reports the following case (*Le Mouvement Médical*, May 8). A healthy young woman fell into labor at full term, the infant presenting by the head, and the delivery being accomplished without difficulty. After cutting the cord the child was examined, and it was found that the right femoro-tibial articulation presented a vice of conformation. The right leg, by a double movement of forced extension and internal rotation, had been twisted forward in front of the thigh and abdominal walls, the extremity of the right foot being in contact with the right flank. The limb was restored without difficulty by simple extension and flexion; the movement of flexion was easy and normal when made either by the volition of the child or artificially, but when the limb was left to itself, if the child restored it by extension it did not remain in a straight line, and the displacement was reproduced, the leg forming a right angle with the thigh. None of these movements

seemed to give the least pain. A gutta-percha apparatus was applied so as to keep the leg partially flexed, and this was re-arranged morning and evening. At the end of five weeks a complete and permanent cure was attained.

X.

HEMORRHAGIC PLEURISY.—At a recent meeting of the Société de Biologie (*Le Mouvement Médical*, May 15), M. Prévost communicated the notes on the following case of pleurisy which he had observed in his clinic. A man was admitted to the ward in December, apparently intoxicated; the liver was much enlarged. Some days afterwards the right side became painful, and there was dyspnoea. Finally, all the symptoms of pleuritic effusion were noted, and thoracentesis was practised. The liquid obtained consisted in great part of nearly pure blood.

A second puncture made some days later gave exit to three litres of the same liquid. Soon after, the patient was attacked by fits of coughing, accompanied by albuminous expectoration, pointing to oedema of the lung.

The patient finally succumbed. Post-mortem examination showed large quantities of false membranes, and on a level with the first puncture a tumor was observed, which proved to be a sarcoma. This sarcoma had been developed under the influence of the traumatism produced by the various punctures.

X.

ERGOT IN THE TREATMENT OF INCREASED MAMMARY SECRETION AND INFLAMMATION OF THE BREAST (J. Schtscherbinenkoff: *Centralblatt für Chirurgie*, No. 19, 1875).—During an epidemic of raphania in the Russian department of Simbirsk, Dr. S. made the interesting observation that a diminution, or even an entire cessation, of the secretion of milk in nursing women was not of rare occurrence when symptoms of ergotism appeared.

He observed a similar phenomenon among cows fed with meal containing ergot, or allowed access to straw in the ears of which grains remained which had undergone similar changes. Since an accumulation of milk in the glandular parts of the breast is regarded as the chief cause of mastitis, he administered ergot in many cases in which this process was in an early stage.

In two cases of multiparae, who at each confinement had suffered with mastitis, going on to suppuration, secale cornutum was administered as soon as any enlargement of the gland, due to an accumulation of milk, was noticed; and its administration was followed by the happiest results. Secale cornutum, in conjunction with quinine (aa gr. v. t. d.), was also used in cases of so-called milk-fever. The same treatment which was used successfully in mammary trouble during the puerperal state was attended with equally good results in tumefaction of the gland, with febrile reaction, in women at a later period of lactation. Secale cornutum was also given at the time of weaning the children, in cases in which a speedy cessation of the secretion was desired. In such cases it was given up to the amount of one drachm for a week, with no unpleasant results.

W. A.

PUNCTURE OF THE BLADDER.—Deneffe and Van Wetter, in a recently published work ("De la Ponction de la Vessie"), have endeavored to ascertain whether this operation is one which should only be resorted to as a last expedient, or whether it is sufficiently safe to allow of its frequent practice. Out of 328 cases examined with this end in view, 44, or 13 per cent., were found to have terminated fatally. Most of these patients, however, died from other causes; so that the operation itself could not be said to have ended fatally in more than 7 cases, or 2 per cent. of the number. The puncture was performed as follows: through the perineum (17 cured, 3 died), through the rectum (86 cured, 11 died), through the symphysis (1 case, cured), below the symphysis (1 case, cured), through the hypogastrium

(125 cured, 27 died), and, finally, by aspiration (54 cured, 3 died).

The operations of forced catheterism, external urethrotomy, and, indeed, the attempt at catheterism, are condemned as much more dangerous than puncture. Puncture through the rectum the authors regard as a very undesirable operation, and accompanied by subsequent inconveniences if the canula has to be retained.

The authors regard puncture of the bladder as more than a merely palliative measure, asserting that it has a direct influence in cases of stricture, so that a large catheter may frequently be introduced after the bladder has been emptied by the puncture. In inflammatory or traumatic strictures, the influence of puncture on the condition of the urethra is still more marked.

In difficult cases, where restitution of the normal canal can only be attained by external urethrotomy, retro-urethral catheterism through the fistula, by Verguin's method, may be employed, in order to fix the locality of the posterior section of the wounded urethra. Nine cases are cited by the authors in which this procedure was adopted successfully. Experience has shown that the peritoneum can always be avoided if puncture is made at a point not more than one and two-thirds inches above the symphysis pubis.

Capillary puncture is only recommended when there is a prospect of the urethra soon regaining its permeability. They cite two cases in which capillary puncture was performed more than twenty times in the same individual without any disagreeable result.—*Centralblatt für Chirurgie*, No. 35, 1874.

X.

CASE OF MÉNIÈRE'S DISEASE.—M. Raymond stated at a recent meeting of the Société de Biologie (*Le Mouvement Médical*, May 15) that there was at that time under the care of M. Charcot a woman presenting all the symptoms found in the affection known as Ménière's disease. The least movement made in the ward caused the patient to become attacked by nausea and vomiting. She experienced at the same time singing in the ears, and vertigo. M. Charcot had ordered this patient sulphate of quinine to the extent of fifteen grains daily, and under the influence of this medication the symptoms had diminished. The constant ringing in the ear, which was almost insupportable, and which she compared to the noise of a railroad-train, had diminished in intensity, and had been replaced by a less severe ringing sensation, similar to that brought on by the use of quinine.

X.

UMBILICAL TUMOR COMPOSED OF THREE HERNIAE.—M. Lucas Championnière recently communicated the following observations to the Société de Chirurgie:

A patient upon admittance to the hospital presented all the symptoms of intestinal strangulation. The umbilical region was the seat of an enormous tumor. Death followed soon after the operation, which was performed *in extremis*. The existence of three herniae was subsequently ascertained; one of these was situated at the umbilical ring, and the two others, constituted by an enormous mass of omentum and a portion of the small intestine, were found under the linea alba.

X.

THE SO-CALLED THIRD DENTITION.—Jos. Scheff (*Wien. Med. Presse*, 1874, No. 47) notes eighteen cases in which the so-called third dentition was dependent upon the retention of one or more milk-teeth in the jaw. Some years later, eruption of these abnormally-retained teeth took place. The permanent teeth, which had remained in the jaw meanwhile, then first made their appearance. If the fact that the earlier set were milk-teeth had been overlooked, it would be easy to regard this last eruption as a third dentition. That this latter was the case Scheff denies.—*Centralblatt*, March 13.

X.

PHILADELPHIA
MEDICAL TIMES.
 A WEEKLY JOURNAL OF
 MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, JUNE 12, 1875.

EDITORIAL.

THE MEDICAL PROFESSION AT THE AN-TIPODES.

ACCORDING to the *Melbourne Medical Record*, to be a doctor in that part of the world, where man walks with his head downwards, the laughing jackass is a bird, cherries have their stones on the outside, beasts have bills, and leaves are set with their edges to the sky, is to do otherwise than sleep upon a bed of roses, to be clothed with a majestic dignity, or to be the recipient of a steady flow of wealth. Including the whole population in Victoria, the doctors are about one in a thousand; and of the possible clients, nearly one-fourth depend upon hospitals and dispensaries for medical advice and treatment, and as many more belong to clubs. As the "highest medical authority of Victoria"—even the august Vice-Chancellor of the Melbourne University—"will finger a club-patient's pulse for six-pence," the outlook for new-comers is not very enticing. Yet European practitioners are notified in the advertising columns of the journal that if they wish to settle in Australia the editor will give them all "the information they may require." We should think the editorial column was a sufficient light-house.

Advertising and puffing in the newspapers appears to be with the profession in Victoria a favorite means of occupying leisure moments, and it is very clearly intimated that custom sanctions "forty per cent. from the druggists and a percentage from the undertakers." A medical profession, like wine,

requires age to ripen, and in a new country must always be composed of a mongrel set, bound together only by the loosest of ties. In 1875, we doubt not, wealth and dignity will be as closely associated with the practice of physic in Melbourne as they now are in London.

VIVISECTION IN THE ENGLISH PARLIAMENT.

TWO bills for the regulation of vivisection are now before the English Parliament. One, Lord Hartismere's bill, prohibits vivisection except in a registered place, which is to be open at any time to the visits of an inspector of anatomy. Vivisections are to be performed only on animals completely under the influence of anaesthetics, and curare is expressly excluded from being deemed an anaesthetic. The performance of a vivisection without anaesthetics requires that a special license be procured at a cost of £10, such license being terminable at the end of six months. Power is given to a justice of the peace to issue search-warrants and to prosecute, and severe penalties are attached.

The other bill is, we believe, fathered by Dr. Lyon Playfair. By it any person—for the purpose of new scientific discovery—is permitted to make an experiment on a live animal, provided the animal be rendered insensible, and be killed on the termination of the experiment, if it have been much injured. Licensed persons may subject an animal to an experiment without the use of anaesthetics, provided that the experiment be solely for the purpose of new scientific discovery, and that insensibility would frustrate the object of the experiment. A register of all such experiments is to be kept. A license may be obtained on application by any person, if accompanied by a certain certificate intended to guard against abuse; but in the case of professors of physiology, medicine, anatomy, or surgery, the certificate is dispensed with. Various penalties are attached, and the mode of their collection prescribed.

THE Legislature of Connecticut, some two years ago, appropriated five thousand dollars, and the city of Hartford a like sum, for the purpose of erecting a monument to the memory of Horace Wells, the discoverer of anaesthesia. Under the direction of a committee, a colossal statue in bronze of Dr. Wells has been executed by Truman H. Bartlett, Esq., and will soon be ready for erection on some commanding site in the beautiful park in the city of Hartford, where the discoverer lived.

It is upon the pedestal, which should be also of bronze, and its ornamentation, that any further funds ought to be expended. This will admit of high and costly adornment, in bas-reliefs, in inscriptions, etc., suited to exemplify the uses of the discovery, at the same time that it commemorates the discoverer. In order to obtain these funds, an appeal has been made especially to physicians and dentists for subscriptions. It appears to us that as it is the people who receive the great benefit of Dr. Wells's discovery, they should furnish the means to do him honor. We trust, however, that the Philadelphia profession will not be backward in the matter.

Letters of inquiry may be addressed to Dr. E. K. Hunt, Chairman of the Committee of the Hartford Medical Society. Subscriptions may be forwarded to Dr. G. W. Russell, Treasurer, Hartford, Conn.

THE celebrated natural philosopher, Pasteur, retires from his position as Professor in l'École de Médecine, owing to age. The Academy of Medicine has declared him "national laureate," and the national assembly voted him an annuity of nearly \$2500, to which should be added his retiring annuity of about half that sum; so that, loaded with honors and furnished with pecuniary means, he can enjoy his old age. In America, distinguished scientists in old age are turned out like old horses, to pick up what they can. Is it a wonder trade and commerce swallow up so much of the brain of the country, and that even men of the strongest scientific instincts are swept into a "practical life"?

AT a meeting of the Board of Regents of Michigan University, it was resolved to create a homeopathic medical college, and to appoint two professors, who shall be designated respectively Professor of Materia Medica and Therapeutics, and Professor of the Theory and Practice of Medicine. For the other branches the students are to depend upon the lectures in the old medical department.

FRANK BUCKLAND, the naturalist, reasons thus: sleeplessness is often due to too much blood in the brain; eat a hard-boiled egg, draw off blood to the stomach, and go to sleep.

THE Jefferson Medical College has bought, we understand, ground back of their present edifice upon which to erect a hospital that shall communicate directly with the college building.

THE University Hospital receives \$10,000 by will of the late Mr. Towne.

LEADING ARTICLES.

SALICYLIC ACID.

NO. II.

A LEADING article published in the *Medical Times*, March 13, contains a short account of the discovery by Kolbe of a cheap method of manufacturing salicylic acid, together with a description of its chemical and physiological properties, and an allusion to some of its possible therapeutic uses.

Since it was written, a number of investigators have taken up the subject, and various communications have been published, particularly in the German journals, giving the results of experiment upon the internal and external use of the remedy in various cases. It is our intention in this article to give a brief account of the results attained, with the hope of stimulating further and more active research on this side of the water.

Experiments upon the internal and hypodermic use of salicylic acid have been made by Dr. Paul Fürbinger.* In the normal condition no lowering of temperature was observed after its administration.

Experiments in septic fever were then made, the fever being excited in animals by giving them quantities of contused spleen infused in stale urine. Salicylic acid was then administered in doses varying from .05 to 0.2 gramme, larger doses being found to produce toxic effects. Irritative fever was also produced by the inunction of croton oil, and purulent fever by means of a saline mixture containing laudable pus injected into the connective tissue.

In all these experiments the acid, when administered, was found to have marked antipyretic powers, the temperature falling very perceptibly in a period of time varying from two to six hours subsequent to its administration. In one case where toxic effects had been produced in a rabbit from an over-dose, the symptoms were those of collapse, and the post-mortem examination showed the cause of death to have been diffuse peritonitis, brought on by extensive corrosion of the lower bowel.

Dr. E. Butt† has employed salicylic acid in various cases of typhoid fever, erysipelas, and acute articular rheumatism with very good results; but the number of patients under his observation has been too small to allow great weight to be attached to his results. He believes salicylic acid to exercise a marked antipyretic effect, and is even inclined to place it on a level with quinine in this respect. No disagreeable effects have been noticed by him in any case.

Stephanides‡ has employed salicylic acid in dysentery and chronic diarrhoea. His experiments extend to only a few cases, in which, however, striking results were obtained. He administered the acid either pure "on the point of a knife" (a method, according to Kolbe,

* Centralblatt f. Med. Wissen., No. 18, 1875.

† Ibid.

‡ Wien. Med. Presse, No. 14, 1875.

not without risk), with tinct. opii, or in some cases by enema to the extent of a gramme at one time.

In a series of papers on the subject of the various organic disinfectants, Drs. Vajda and Heymann* discuss, among others, the action of salicylic acid. Its disinfectant effect they say might have been anticipated from its chemical relation to carbolic acid, but its superiority to this agent in many respects is surprising.

While the continued use of carbolic acid brings on such local symptoms of reaction as burning sensations, rise of temperature, and redness, none of these symptoms were produced by the use of salicylic acid under precisely similar circumstances. Even in a case where the cavity of a large abscess had been repeatedly washed out with a two-and-a-half per cent. solution of salicylic acid, much of the fluid necessarily remaining in the cavity, no disagreeable effects were produced. Neither have any of those general unpleasant symptoms been noticed, such as headache, feverishness, and the like, which are observed after long-continued use of carbolic acid. In dressing large superficial wounds with salicylic acid no unpleasant general effects have been observed, although the fact of its absorption is shown by a green coloration of the urine. In markedly infecting wounds salicylic acid is useless, while carbolic acid and its congener cresylic acid neutralize their effect. This is probably due to the cauterizing influence of these latter agents, since when they are used in a diluted condition they likewise are found to fail.

The most complete contribution to our knowledge of the uses of salicylic acid in surgery has been made by Thiersch.† He finds that granulating wounds upon which a solution of one part to three hundred has been sprinkled show no signs of inflammatory reaction; if after the acid has remained in contact with the granulations for some time these become covered with a white film of precipitated albumen, the healing process still goes on as usual underneath. Sprinkled upon gangrenous or other foul surfaces in substance, salicylic acid deprives them of odor, and by occasional renewal the deodorization may be maintained indefinitely. When, however, there is a thick body of putrefying tissue, the acid cannot of course penetrate deeply enough to insure the absence of all smell.

Thiersch is an enthusiastic advocate of Lister's method of dressing wounds, and his accurate and thorough manner of carrying out the plans of the latter are well known. He has, of course, used salicylic acid by Lister's method, and is disposed to give it decidedly the preference over carbolic acid. For one purpose, however, it cannot be used, that is, for disinfecting surgical instruments, since it oxidizes steel with great rapidity.

Thiersch has devised a salicylic wadding for hermetically sealing wounds treated by the antiseptic method; it is composed as follows: Two ounces of salicylic acid are dissolved in two pints of alcohol of specific gravity .83, and this solution is diluted with twenty pints of

water at a temperature of 158° to 178° F. Six pounds and eight ounces of "cotton batting," after having been first deprived entirely of oily matter, are saturated with this solution.

When dried, this wadding contains about three per cent. of salicylic acid, which is sufficient for most cases. Thiersch employs, however, another wadding containing ten per cent. of the acid, and which he distinguishes from the first by tinting it slightly by means of cochineal. When handled dry, this wadding should irritate the hands slightly; if it does not do this, it does not contain a sufficiency of acid.

The cotton wadding thus used by Thiersch has one disadvantage, it is slightly less permeable than it should be, and therefore, in cases where the discharges are abundant, these are apt to form collections under the dressing instead of soaking into it. To avoid this, Thiersch uses jute impregnated with salicylic acid in profusely suppurating wounds. This, though coarser than cotton, is much more permeable.

Thiersch's experience extends to one hundred and sixty of all kinds of surgical cases, treated in the Leipsic clinic during the past year. He finds that under the use of the salicylic acid, cases of pyæmia were much diminished. Erysipelas, on the contrary, did not appear to be affected. In thirteen cases, one fatal occurred.

This circumstance suggests a curious dilemma commented upon by Thiersch. If Lister's method excludes the atmospheric ferment, then erysipelas cannot be due to this cause. If, on the other hand, erysipelas is due to this cause, then Lister's method is powerless to prevent the access of germs to the wound.

Thiersch inclines to the former view, and regards the bacteria found in erysipelas, even under Lister's dressing, as of accidental occurrence.

A discussion, however brief, on the subject of the relation of vegetable organisms to disease, would lead us far out of the range of a short article like this, whose object is entirely practical. We will, therefore, avoid this, and in conclusion state a few of the advantages and disadvantages claimed for salicylic acid.

1. It is antiseptic.
2. It is odorless. This is a double advantage, for not only does it make the application of the remedy much more agreeable, but the limit of its effect can easily be measured when it is used in foul-smelling discharges, and the amount to be employed may be regulated accordingly.
3. It is non-irritating when applied to the skin, to wounds, or to granulating surfaces.
4. It is not poisonous when absorbed into the circulation.

On the other hand, salicylic acid must be admitted to have certain inconveniences. Like carbolic acid, it roughens the hands if they are much exposed to the vapor, as in Lister's method of dressing; and it also excites coughing and sneezing when inhaled, until toleration is induced. Doubtless other inconveniences may appear when further investigation is made, as it is usual

* Wiener Med. Presse, Nos. 6-19, 1875.

† Volkmann's Sammlung Klinische Vorträge, Nos. 84 and 85, 1875.

for a new remedy of this sort to put its best foot foremost; but enough has been done to induce a full and thorough trial in hospitals and by physicians generally. In this city, Dr. Washington Atlee has recently used a strong solution of salicylic acid for the purpose of washing out the abdominal cavity after the operation of ovariotomy. No signs whatever of any local irritation were observed, but the patient succumbed a few days after the operation from an immediate suppression of urine. As the post-mortem examination is said to have revealed renal disease of some standing, it is impossible to say whether or not the salicylic acid could have had any injurious effect in this instance.

Dr. A. Hewson has cured a case of favus, without cutting the hair, by two applications of a saturated solution of the drug. We believe also that our surgeons are using it with satisfaction.

X.

CORRESPONDENCE.

THE NEW JERSEY STATE MEDICAL SOCIETY.

ATLANTIC CITY, May 26, 1875.

M R. EDITOR,—Our city by the sea recently had a regular spring tide of doctors, and, thinking it would perhaps keep bright for a season your fireside, I have gathered up some drift-wood. We do not enjoy the inestimable advantage of a county medical society, and consequently the Camden Society made all the arrangements and did the honors of the occasion. With the aid of the Camden and Atlantic Railroad president, they whirled us from your city through the delightful scenery of Jersey,—concerning parts of which your correspondent could well believe what tradition states, *i.e.*, that the crows weep for pity as they fly over it. If every tear-drop crystallized into a grain of sand, crows must have been abundant. At Congress Hall we found the tables loaded with Jersey wine,—a present from one of the neighboring vineyards. Talk not of Heidelberg, when Atlantic City is at your doors. Rather thin, and smacking of the vinegar-cask, however.

In the evening the serious business commenced. At the appointed hour the 100th meeting of the New Jersey State Medical Society was called to order by Dr. Larison, of Hunterdon County, the President of the Society. Eighty-seven delegates, representing eighteen counties, responded to their names at roll-call. There were also delegates present from the New York, Pennsylvania, Massachusetts, and Rhode Island medical societies.

Dr. John W. Snowdon, of Camden County, chairman of the committee, welcomed the Society to Atlantic City in an interesting address, in which he detailed some of the peculiarities and hygienic advantages of that seaboard section of the State, in which he has practised upwards of thirty years.

Dr. George H. Larison, the President, then read his address. He spoke of the progress of New Jersey during the past century, and alluded to the approaching

centennial celebration of the nation. He then traced the development of the science of medicine from the time of Moses down to the present day, and closed with a very fine peroration, referring to the duties of physicians, both as individuals and as associations.

Dr. Wickes, from the Standing Committee, reported that the records of the Society were complete for one hundred years past, and a committee was appointed to revise and publish them.

At this point occurred what is unusual of late years, but what was very customary in the earlier history of the Society: two candidates applied to the Society for examination for the title of M.D., which, according to the laws of New Jersey, enables them, if they successfully pass it, to practise in that State without a college diploma. Drs. Kipp, of Newark, Foreman, of Hudson, and Newell, of Hunterdon, were appointed a committee to examine them. If this examination, which these two gentlemen successfully passed, was as thorough (and we do not doubt that it was) as in the old days, when the law compelled every doctor who wished to practise in New Jersey, whether a graduate of a medical college or not, to pass an examination before the State Society, they may be proud of their success; for I have a vivid recollection of hearing some of the Nestors of the profession in that State recount how they had passed through both an examination at college and at the hands of the Society's Committee, and that the latter was much the more trying ordeal. I could not help thinking what a change would take place if that old law could be re-enacted,—how the State would be cleared of quacks and charlatans, and what—tell it not in Gath—a consternation would prevail in the very ranks of the Society.

The Nominating Committee was then appointed, consisting of one delegate from each county represented in the Society, who sit after the adjournment of the evening meeting, and select the officers for the succeeding year, and also name the place at which the next meeting will be held.

In the evening the Camden County Medical Society gave a banquet to the assembled doctors, followed by the usual round of speeches. Your correspondent was clearly established in his belief that doctors are men of deeds, not words, but was mightily shaken by the witty speech of Dr. Hunt, and well pleased by that of Mr. Lucas, a railroad director, who proved conclusively that to enable a baby to digest his nursing-bottle, india-rubber teat and all, it was only necessary to bring him to Atlantic City.

After the opening of the regular meeting of Wednesday morning came the report of the Standing Committee, read by the chairman. This is the most interesting report made to the Society, and is a feature peculiar to this Association; and, I believe, has no parallel in any other medical organization in the country.

The Standing Committee of the New Jersey Medical Society is composed of three members, two of whom are elected annually, but the chairman is a perma-

uent officer. This position is now, and has been for many years, filled by Dr. Stephen Wickes, of Essex, certainly one of the ablest men in the Society. It is the duty of this committee to obtain reports from all parts of the State,—reports from district medical societies of the meteorological and sanitary condition of their sections, the diseases prevailing during each year, their treatment, reports of specially interesting and unusual cases,—in fact, a report of everything that can interest the profession; and all communications upon these subjects must first pass into their hands before they can be presented to the Society. Annually it is their duty to compile from the documents received from all these various sources a general report, to be read at the yearly meeting of the Society, which gives as it were a panoramic view of the medical history of the State during the previous year.

The local reports themselves are not read unless deemed by the committee exceptionally interesting. They are, however, published with the transactions of the Society, and distributed to every member of it. No discussion of this report has heretofore been allowed, but during the morning, on motion of Dr. E. M. Hunt, it was adopted that at future meetings a discussion of half an hour should be permitted, limiting each speaker to five minutes' time. By the above plan the duration of the annual meetings has been accurately limited to one evening and one day, and yet all the affairs of the Association are thoroughly attended to.

From the report of this year, read by Dr. Wickes, we learn that the health of the people of New Jersey has been unusually good during the past year; but few local epidemics were reported, and among them was one of births from Cape May County. Last summer and autumn were exceptional healthy seasons; cholera morbus, cholera infantum, dysentery, and diarrhoea being milder and less frequent than usual. The valleys of the Delaware, Raritan, and Passaic Rivers, where malarial diseases are common, enjoyed unusual exemption from them. The severe cold weather of the winter and early spring caused an increase of sickness, and pneumonia, scarlet fever, diphtheria, and other throat and thoracic affections prevailed throughout most of the State. Diphtheria occurred endemically over many districts, and was frequently fatal. One reporter remarks that in his district it was chiefly confined to low and unwholesome localities, but reports two instances in which it occurred in places enjoying the best hygienic advantages, where, upon investigation, he found unnoticed sources of poison from organic matter. Another reporter narrates a very singular circumstance. During the last summer, three children were sent from one of the cities in East Jersey to a farm in the country to preserve their health, which was good. They were given milk to drink from one fine, healthy cow. One day the cow escaped from her pasture-field into an adjoining one, containing the same kind of pasturage, and also a pond of stagnant water from which she drank. The next day one of the children was taken suddenly sick, and died; and, within a few

days, the other two were also taken sick, and died. The cow remained perfectly healthy.

Dr. William Pepper, of Philadelphia, being favorably reported from committee by Dr. Bodine, of Trenton, was unanimously elected an honorary member of the Society.

Dr. Elmer, of Trenton, Corresponding Secretary, made a report of his correspondence with other societies, etc., during the year. He also reported that at the last session of the Legislature a bill was introduced into the House by the homœopaths, appointing a Board for the Granting of Licenses, to be composed of four regular physicians and three homœopaths. This was defeated in the Senate by the vigilance of the Trenton doctors. The bill for the organization of a Board for the Regulation of the Sanitary Condition of the State had been defeated. This subject afterwards gave rise to a considerable debate, as the policy of the State Society has been for many years to have as little legislation in their behalf as possible, deeming it the wisest course to ask only for what was indispensable to them, and to prevent quackery from getting anything. The whole subject was finally referred to a committee.

After various reports, essays, and resolutions had been read or acted upon, Dr. Pumyea, of the Nominating Committee, reported the following officers for the ensuing year: President, Dr. William O. Gorman, Newark; First Vice-President, Dr. John V. Schenck, Camden; Second Vice-President, Dr. H. R. Baldwin, Middlesex; Third Vice-President, Dr. John S. Cook, Warren; Recording Secretary, Dr. William Pierson, Jr., Orange; Corresponding Secretary, Dr. William Elmer, Trenton; Treasurer, Dr. W. W. L. Phillips, Trenton; Standing Committee, Drs. S. Wickes, S. Thornton, and Thomas Ryerson. These officers were unanimously elected.

Cape May was adopted as the place of meeting in 1876.

SAND CLAM.

NEW YORK, May 24, 1875.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:
THE "Baldwin Pavilion" of the Woman's Hospital is now almost completed, but it cannot be opened for some time, unless some of the friends of the institution will endow it still more liberally.

It seems that Mr. John C. Baldwin gave a hundred thousand dollars for this building, on condition that it should be erected within a certain specified time. The income of the hospital now, however, will not permit of the increased expenditure necessary for the maintenance of this addition, and the new portion will, therefore, probably have to remain unoccupied for the present. This is the more to be regretted, as the number of applicants for admission to the low-priced and charity wards is constantly much greater than can possibly be accommodated. The Baldwin pavilion is of precisely the same appearance and construction as the older building, and when it is opened the capacity of the hospital will be just doubled. Since the resignation of Marion Sims, early in the winter, no new chief-super-

geon to the institution has been appointed, the number of patients being equally divided among Emmet, Peaslee, and Thomas. The first has his operations on Tuesdays, the second on Wednesdays, and the third on Saturdays; and only physicians with special invitations are admitted to these.

On Wednesday last Dr. Peaslee had an ovariotomy which presented several points of interest. He was to have performed it the week previous, but the condition of the patient did not permit. There were evidences of suppuration of the cyst which indicated a very unfavorable effect upon her system. The tumor was of the right ovary, and consisted of one large cyst and one small one, the latter situated at its lower portion, near the pedicle. An enormous quantity of semi-purulent fluid (probably five or six quarts) was drawn off, which was exceedingly fetid, and some of which was very thick and grumous. Yet the patient had been tapped only about ten days before, and twenty-five pounds of fluid obtained then. The latter did not contain such a large proportion of pus. The adhesions were very extensive and firm, and great care had to be exercised in their detachment; especially as some of them reached even to the liver. The omentum, instead of being spread over the anterior surface of the tumor, as is usually the case, was found rolled up above it. The peritoneum covering the intestines was completely engorged with blood, thus showing how imminent was the danger of extensive inflammation. The pedicle was of moderate length. It was secured by silk ligatures and then dropped into the abdomen. A small cyst, of the size of a bean, having been discovered in the left ovary, it was evacuated, and several small vessels were now ligated, as some little hemorrhage had been occasioned by the breaking up of the adhesions. A tube was inserted into the lower end of the abdominal incision, which reached behind the uterus into the cavity of the pelvis, for the purpose of washing it out, if necessary, with antiseptic fluids. This was first packed with dry cotton cloth, and then the latter moistened with a saturated solution of salicylic acid, so as to render it air-tight. Dr. Peaslee thinks an open tube is simply an invitation to septicæmia, and if it be true that this is occasioned by the entrance of bacteria into the abdominal cavity, it is effectually prevented by thus plugging up the tube. The edges of the wound were secured by eighteen or nineteen silver-wire sutures, about half an inch apart, as Peaslee prefers to have a large number in case excessive tympanitis should ensue. Over the whole a compress saturated with the salicylic acid solution was placed, and then the abdomen was covered with strips of adhesive plaster five or six inches in width, passed completely round the body. The operation lasted over an hour, being rendered somewhat tedious by the care necessary in detaching the numerous adhesions and by the time consumed in controlling the resulting hemorrhage. The prognosis was not very favorable, and the patient died about thirty hours afterwards. Dr. Peaslee also expected to operate on a case in private practice the

same week. From the physical signs elicited he supposed the tumor to be a monocyst, and accordingly tapped it, when he found it was in reality a polycyst. He is of the opinion that polycysts should never be tapped, unless one is prepared to go on with the operation of ovariotomy within twenty-four or forty-eight hours afterwards, as fatal effects may sometimes follow if this is not done.

The excitement in regard to affairs at the Presbyterian Hospital is still unabated, and we understand that several gentlemen have been approached by the authorities with the idea of finding out whether they would accept positions on the visiting-staff in the event of other possible "resignations" taking place. The action of the board of managers before spoken of has resulted in calling forth a protest, which has just been made public, signed by Drs. Markoe, Hamilton, Sands, Metcalf, Thomas, Van Buren, Wood, Flint, Emmet, Barker, Jacobi, Thomson, Draper, Loomis, Peaslee, and other leading medical men, without respect to college or clique. After expressing the regret with which they have learned of the summary dismissal of four of the visiting-physicians, who, so far as is known, were fully competent for the positions which they held, and discharged their duties with diligence and skill, they go on to say,—

"We believe that you have failed to realize the full character of your action. In thus discharging these gentlemen, you in effect proclaim your opinion that they are unfit for the positions which they held. By so doing you incur the responsibility of seriously injuring their reputation; and you have taken this grave step without preferring any charges, or assigning any reason for so doing. We believe you will admit that while you have acquired certain rights in assuming the position of manager of a hospital, you have also incurred certain obligations. While it is your right to appoint and dismiss the medical staff, it is also your duty to exercise this right for the best interests of the hospital. It is evidently your duty to obtain for the patients under your charge the best medical and surgical skill which our profession affords. We can hardly believe that any physician or surgeon of reputation will serve in any institution from which he is liable to be discharged without just grounds. We believe, therefore, that both as members of the medical profession and as citizens we are justified in asking that you shall make public the reasons for your late action."

During the past week the report of the Commissioners of Charities and Correction for the first three months of the year was presented to the mayor. From this we learn that the expenditures of the quarter, which, of course, came out of the pockets of the tax-payers of New York, amounted to \$368,818. This sum was divided among the items, salaries, supplies, out-door poor, and repairs to buildings and apparatus. About six hundred tons of coal were consumed in the institutions, and about four hundred distributed to the out-door poor. The number of inmates remaining in some of the institutions March 31 was as follows: Bellevue

Hospital, 732; Charity Hospital, 807; Fever Hospital, 4; Epileptic and Paralytic Hospital, 116; Hospital for Incurables, 117; Convalescent Hospital, 239; Nursery, Randall's Island, children, 481, adults, 110; Nursery Hospital, Randall's Island, children, 184, adults, 49; Infants' Hospital, Randall's Island, children, 277, adults, 192; Lunatic Asylum, Blackwell's Island, 1183; Lunatic Asylum, Ward's Island, 676; Idiot Asylum, Randall's Island, children, 170, adults, 150. The number remaining in the Penitentiary, Almshouse, Workhouse, City Prison, and other departments, brought the total population of the institutions up to 9718; of whom 6509 are males, and 3209 females. Number of applications for relief by the sick during the quarter, 3210; of these, 136 were rejected, 1309 were sent to Bellevue, 1451 to Charity, and 292 to various other hospitals. The Commissioners state that the Charity Hospital and other retreats on Blackwell's Island have received their careful attention, and that the supplies, therefore, have been plentiful and of good quality. Charity Hospital had 747 inmates January 1, and received 2324 during the quarter; 202 died, and 2062 were discharged. Its capacity is 2000 beds. The Smallpox Hospital is now under the direction of the Board of Health. Only 13 persons were in the Inebriate Asylum on Ward's Island, and the Commissioners think it a failure. During the quarter the Out-door Relief Department furnished money or coal, or both, to 16,806 families, comprising 61,079 persons.

The ancient and honorable the Society of the Cincinnati held their Triennial Convention a short time since in New York; when delegates from all of the seven States in which its members reside were present, and Hon. Hamilton Fish was for the seventh time elected President. The Committee of Arrangements consisted of Gen. John Cochran, Alexander Hamilton, Jr., and John W. Greaton; Gen. Cochran, its chairman, being a lineal descendant of Dr. John Cochran, Surgeon-General and Director-General of the hospitals of the Army of the Revolution.

The Central Dispensary, one of the newer and less richly-endowed institutions of the kind in the city, has made a very lucky hit in securing for a benefit at the Academy of Music the services of George Rignold, the most recent theatrical lion in New York. As this occasion will be his farewell to America, the receipts will, no doubt, be exceptionally large, for more than one fair creature in the best society has had her head turned by this Adonis of an actor. The tone of his letter accepting the proposition is admirable, and seems to show that he really desires the benefit to be as successful pecuniarily as possible. In it he says, "My present engagement terminates on the 5th of June, and I wish to sail for England as soon as possible after that date, but a few days may well be devoted to such a purpose in a city where I have met with so much kindness and generous hospitality. I am ready to place myself at your disposal. If you will allow me to suggest, you will announce it as my last appearance in New York, and I will play for you my original charac-

ter of *Amos Clark*, in the 'Bar Sinister,' in the study of which I had the assistance of its accomplished author, the late lamented Watts Phillips. This piece has never been acted in New York, so far as I can learn, and it met with great success abroad, and was the means of making me more popular than any other character I have sustained. I trust it will prove a substantial benefit to the charity."

The following changes and appointments at the colleges are announced: Medical Department University of New York,—Dr. Alfred C. Post resigned from the chair of Surgery, and elected Emeritus Professor of Clinical Surgery. Dr. John T. Darby, formerly of South Carolina, and late Professor of Surgical Anatomy in the University, appointed to Dr. Post's place. College of Physicians and Surgeons,—Dr. Alonzo Clark elected President of the College, in place of the late Dr. Edward Delafield. Dr. Thomas F. Cock, Trustee, to fill the vacancy left by the death of Dr. Delafield. Dr. Francis Delafield, Adjunct Professor of Pathology and Practical Medicine. Dr. John G. Curtis, Adjunct Professor of Physiology and Microscopic Anatomy.

PERTINAX.

PROCEEDINGS OF SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

WEDNESDAY, APRIL 7, 1875.

DR. WILLIAM S. FORBES read the history of a case of *acute tetanus*, beginning on the fourth day after an extensive burn, and advancing with great rapidity,—having, in forty hours from its commencement, a temperature of 102°, a pulse of 133, and a respiration of 32 per minute,—presenting marked opisthotonus, with trismus and a horrid tetanic grin; and having the muscles of deglutition considerably involved, together with paroxysms of brief and painful spasms which yet were perfectly controlled by inhalations of nitrite of amyl, which was given in doses of five drops twice a day for forty-six days.

S. H., aged 17, a brickmaker, was admitted to the male surgical ward of the Episcopal Hospital on the afternoon of the 5th of February, with burns of his body and extremities from hot iron, which had been accidentally blown against him from a foundry. He had walked to the hospital, a distance of a mile and a half, the air at the time being very cold. He was burned severely from his waist to his heels; the greater portion of the burn being of the second and third orders of Dupuytren. He was at once put to bed, his wounds dressed with linseed oil and lime-water, his whole person enveloped with cotton, and half a grain of sulphate of morphia administered and repeated five hours later. The following evening he had a chill, and complained of pain in his extremities and along the spine. Morphia was given, the oil-dressing was removed, and replaced by the ceratum resinæ acidum. The following two days he felt quite comfortable; took food and a little morphia, which was the last that he received.

On the 9th he had no desire for food; complained of soreness, and had a severe convolution in the evening.

On the morning of the 10th, he had stiffness of the jaws, with pain in the back of his neck, and his mouth began to assume a tetanic grin. He was given milk

and beef-tea, and five ounces of brandy during the twenty-four hours.

On the morning of the 11th there was marked opisthotonus with trismus, accompanied with great difficulty of swallowing, which began the evening before. His skin was hot, temperature 102° F.; his pulse 133, and his breathing 32 per minute. A teacupful of beef-tea was ordered every two hours, alternately with milk; to be taken day and night, and eight ounces of brandy in the twenty-four hours. He had a convulsion during the night.

In view of the excellent effects obtained by the use of nitrite of amyl in epilepsy, angina pectoris, etc., it was determined to try the virtues of the same drug on the contraction of the muscles in this case of tetanus, and to try it alone, and without the intervention or administration of any other medicinal agent whatsoever, that its efficacy might be properly tested, and that it should stand or fall as the issue of the event, in this case at least, might determine. Nitrite of amyl had been used previously in three cases of acute tetanus, but in only three cases, and each case terminated successfully, but other and well-known agents were at the same time administered. This case is the first in which amyl has been used alone, and successfully, and its action recorded. The amyl was first administered on the evening of the sixth day after the accident, and about forty hours after tetanus first discovered itself. Before the three drops had half evaporated, the heart's action became more quiet; and at each inhalation of the amyl afterwards it was generally observed to have a quieting effect on the heart's action. Towards the latter part of the treatment the pulse was among the eighties, although on giving the patient five drops on the 4th of April, six days after he had ceased to inhale five drops twice daily, the heart's action was 132 and tumultuous. The eyes were suffused, the skin of the face and neck became very much congested; indeed, the whole surface of the body was more or less congested; but this soon passed away when the amyl was withdrawn. The three drops had scarcely begun to cause congestion when there was evinced a tendency to gape, and a few days afterwards gaping and yawning both took place at each inhalation until the administration of the drug was discontinued.

This gaping and yawning was produced in each subsequent administration of the drug, which was given twice daily. A marked improvement was at once manifested in all his symptoms.

On the 14th, having another spasm, the dose was increased to five drops twice daily.

The amyl in the hospital giving out on the morning of the 18th, it was not replaced until the evening of the 20th. During this time he grew rapidly worse; the opisthotonus and the risus sardonicus both returned, and his pulse and temperature rose rapidly. On recommencing the inhalation of amyl he felt better almost immediately, and from that time progressed steadily to complete recovery.

On the 29th of March, forty-six days after the first dose of the amyl was given, the patient appeared to be perfectly well. He could walk about, and eat and drink, and enjoy himself in every way as before the attack, except having a feeling of weakness. The amyl was now discontinued; he had inhaled one ounce.

In reviewing the results of the observations of pathologists in cases of tetanus, Dr. Forbes stated, we find that they all point to disintegration of tissue as an established fact. We also find through the researches of physiological chemistry that the capability which muscle has of exercising its functions depends for its strength upon the presence or absence of certain matters formed in this muscle itself by the decomposition of the muscular tissue. Lactic acid and kreatine are the products

of decomposition of muscular substance; they are to the muscle exhausting matters; they act in an opposite manner on the peripheral nervous system; they elevate the excitability of the muscular nerves; *they are muscular stimulants*. And we find that muscular contraction depends on the forces of the muscular substances set free and rendered available by increased metamorphosis of matter, and that the chemical bodies mentioned, lactic acid and kreatine, produce no definitive alteration of the muscle by their presence, but that their effects may be destroyed by their removal. The simple removal of the exhausting stimulating matters, *lactic acid and kreatine*, from the muscle, restores the normal vital properties of the muscle.

What, then, are we to learn from these observations and this case of tetanus? We learn that tetanus is the result of an augmented disintegration of muscular tissue; that the products of this disintegration, lactic acid and kreatine, further excite the nervous peripheries until by reflex action there is established a "violent and painful contraction of the voluntary muscles," which is long continued and "heretofore uncontrollable;" that in traumatic tetanus the augmented disintegration of muscular tissue is caused by an increased excitation of the nerve-peripheries exposed; that in idiopathic tetanus there is a self-generated power akin to the poison of rabies and to strychnia, exciting the nerve-peripheries, which, by reflex action, causes the augmented disintegration of muscular tissue, and the products of disintegration, lactic acid and kreatine, which further excite the nerve-peripheries until there is established the condition known as tetanus.

Impressed with this as the pathology of tetanus, the appropriate treatment should be the use of those agents which are known to prevent the disintegration of tissue, which will lessen the irritated nerve-peripheries, which will sustain nutrition and advance the elimination of the morbid products.

The modus operandi of the nitrite appears to be by arresting the process of oxidation in the tissues, and the same reasons which lead to its use in tetanus—namely, to prevent the disintegration of tissue, and to lessen the irritated nerve-peripheries while nature is eliminating the morbid products—should also cause it to be employed in hydrophobia.*

SELECTIONS.

TRANSFUSION.—The question as to the practicability of using the blood of an animal belonging to a different species has lately been to some extent determined by Landois (*Centralblatt*, 1874, No. 27) and Ponfick (*Virchow's Archiv*, vol. 62), who have shown that the moment the amount of such blood exceeds a small and fixed quantity, unfavorable symptoms will under all circumstances develop themselves. Ponfick discovered the presence of free haemoglobin in the blood-plasma in these cases, and, as a natural consequence, in the various organs and their secretions. He draws attention to the anomalous presence of this substance, which is never found in normal blood, in the blood-plasma, and, considering that the function of the kidneys is to get rid of such a substance, he concludes that the deleterious effects of such transfusions are caused by the inability of these organs to perform the extra work thus imposed upon them. That the kidneys are hereby seriously inflamed is proved by finding after death a copious exudation of plasma into the lumina of the

* Since this paper went to press, the last number of *New Remedies* has been received, containing a note of a case of tetanus successfully treated by inhalations of nitrite of amyl, reported by Funkel, of Berlin.

uriniferous tubules, which at once causes an insufficient amount of urine to be secreted. Death takes place just as it does in cases of uræmia, from suppression of urine, the symptoms being in both cases similar. The success which Dr. Hasse, who always transfuses lamb's blood, professes to have obtained is not above question, and the results obtained by other operators, as, for instance, Birsch-Hirschfeld and Ries, have not come up to the expectations which a perusal of Dr. Hasse's publications is calculated to awaken. In three cases in which I have lately been called upon to perform the operation, I used defibrinated human blood. The ordinary operation was performed twice for excessive anaemia (pseudo-leukæmia), and once in a case of poisoning with carbonic oxide. In one of the cases of anaemia and in the case of poisoning with carbonic oxide, the operation was quickly followed by the patient's recovery. The other case of anaemia, which occurred in a young man aged 27, proved fatal five hours after the operation, with all the symptoms which usually accompany death after the transfusion of animal blood. None of the patients complained during the operation either of violent stitch or pain in the back, which is a constant symptom when animal blood is used. In all three the temperature rose during the two hours following the operation to 104° and 104.9° F., and then sank quickly to normal. There were no further symptoms. The blood transfused was on each occasion obtained from patients who were suffering from some slight bronchial affection. Immediately after the operation, the patient, who, as above mentioned, afterwards died, felt quite well, and, like the other two, his pulse was stronger and fuller than it had been previously, and his breathing, which had been somewhat hurried before the operation, became quieter. During the third hour after the operation he began to complain of want of breath, and became very restless, tossing himself about in bed, and died quite suddenly without presenting any very special symptoms.

The urine that was found in the bladder was the color of blood, and contained some cylinder-shaped bodies, which were composed of a finely granular, yellowish-red mass, which contained, however, no red blood-corpuscles, but on which the usual haemoglobin markings were plainly visible.

At the post-mortem, the heart was found slightly hypertrophied and fatty. The spleen was slightly enlarged; there was extravasation of blood beneath the serous membranes, especially the pericardium and pleura. Neither macroscopically nor microscopically could any alteration be detected in the vessels. The kidneys were large and unusually pale. Under the microscope the epithelium of the straight tubes appeared dull. Here and there at the junction of the straight and convoluted tubes broad cylindrical bodies were found which corresponded exactly with those in the urine. All this agrees accurately with the post-mortem appearances described by Ponfick and Landois as occurring in cases that proved fatal after the transfusion of animal blood. I have not quite made up my mind as to what were the conditions in this case that led to the fatal termination. It seems, indeed, probable that there was, if I may be allowed to use the expression, a sort of morbid predisposition of the whole circulating system and its contents. From the state of fatty degeneration in which the heart was found, it is plain that there must have been some interference with the nutrition of the vessels, and a considerable change in the constitution of the blood. Now, why should not blood whose chemical and morphological elements have undergone such a change bear the same contrast with healthy blood, as it has been found by experiment that lamb's blood does with dog's blood?

It will be very hard to determine in successful cases

what influence the transfusion has had, or if, indeed, it has had any. But the operation itself is so simple, and its good effect so notorious, that it certainly deserves to be performed oftener than it is. In the case of leukæmia that I transfused successfully, the operation had a marked influence on the constitution of the blood. For a drop of blood obtained before the operation by pricking the finger appeared of a light blood-red color and watery; while a drop obtained in a similar manner after the operation had a florid red color, and seemed thicker. Both before and after the operation the red blood-corpuscles presented a peculiar pale and glistening appearance, and their number was not perceptibly increased by the operation. I may further remark that the eight cases in the Augusta Hospital, in which Dr. Kuster lately performed transfusion with lamb's blood, all turned out unsuccessful. These eight cases all died, and in none of them was the good effect of the operation perceptible for more than from ten to fourteen days. In one case the operation was probably the immediate cause of an attack of haemoptysis, and in another it was followed by protracted fever. All the patients complained during the operation of violent pain in the back, and great difficulty in breathing. From half an hour to an hour after the operation they were seized with a rigor, followed by a rise in temperature, which was again dissipated in from five to six hours. It is only fair to mention that all these patients were suffering at the time of the operation from some severe surgical injury.—*Dr. C. A. Ewald, Charité, Berlin; from Irish Hospital Gazette.*

GLEANINGS FROM OUR EXCHANGES.

LUXATION OF TESTICLE.—Dr. Hess reports a case of luxation of the right testicle. An artilleryman, thirty-one years of age, was knocked over by the rebound of a cannon, and was found lying upon his face unconscious, his sabre between his legs. On his return to consciousness a small tumor was discovered in the upper part of the thigh, and was supposed to be caused by an effusion of blood. Two days later, on a more careful examination, the right testicle was discovered underneath the skin on the inside of the thigh, at a level with the lower border of the scrotum. It could be moved upwards, but was very painful. The right side of the scrotum was empty. At the end of a few days the reduction of the displaced organ was effected. The author thinks that the testicle was displaced by being pushed back to the inguinal canal, and in consequence of the resistance offered by the sabre could not return to its place, but was pushed under the skin of the thigh.

TESTING FOR CHLOROFORM.—E. Rennard describes, in *Pharm. Zeitschrift für Russland*, an interesting case of detecting chloroform in a body which had been dead seven days. About sixty grammes of the liver and intestines, with one hundred and twenty grammes of blood from the same, were distilled, and ten cubic centimetres of a perfectly clear distillate obtained. From three to five cubic centimetres of this liquid were mixed with two cubic centimetres of an alcoholic solution of potash and one drop of aniline, or some salt of aniline, and the test-tube gently warmed by dipping it in hot water. The disgusting and penetrating odor of isonitrit was at once observed. This test, which was devised by Prof. A. W. Hoffman, will detect the presence of one six-thousandth part of chloroform, and may be employed where all the usual tests fail.

To *bleach sponge*, wash first in weak muriatic acid, then in cold water; soak in weak sulphuric acid, wash in water again, and finally rinse in rose-water.

MISCELLANY.

THE MEDICAL NIGHT-SERVICE OF ST. PETERSBURG.—The *Vox* gives some details of the practical working of this new institution, already referred to in these columns, and which has now been in operation for a twelvemonth. At first, this new night-service, founded by the private exertions of a few medical men, had many difficulties with which to contend; but perseverance triumphed in the end, as it usually does. This novel institution is now found to be extremely useful to the inhabitants of St. Petersburg, and reckons persons of all ranks and means among its clients. The medical men on duty are always ready to render the services asked at their hands, without any previous knowledge that their labor will prove remunerative; neither do they shrink from going, when required, to the most dangerous and notorious localities. The number of visits made and carefully registered during the current year amounts to 1024, of which the greatest number was in January, when they amounted to 152; the maximum of visits made in one night being six, and the minimum three. The patients comprised 524 men, 363 women, and 137 children of both sexes. These nocturnal duties were performed by fifteen of the permanent staff and thirty-five occasional helpers. The fees paid by persons in good circumstances have been utilized in completing the necessary arrangements for this night medical service and in organizing small surgeries, where the necessary appliances may be always found at hand. The example thus set by the medical profession at St. Petersburg has been followed by the sincerest of flattery, "imitation," at Moscow, Odessa, Warsaw, and other large cities of the north.—*London Medical Record*.

CRIME AND AUTOMATISM.—Dr. Despine, in his *Psychologie Naturelle*, gives a striking analysis of the mental status of the criminal classes. Attracted by the singular want of emotion displayed by most criminals, Dr. Despine was led to a thorough examination of court records and other sources of information. He arrives at a belief in the entire absence of moral sense in this class. He says that free-will, which in the normal man is only controlled by the sense of duty, in the criminal has no such counter-balance, this sense being wanting. His acts are, therefore, mentally automatic, the result of the strongest instinct, appetite, or passion prevailing at the time. Most criminals are, therefore, morally irresponsible, no matter how great the crime as against society. Like brutes, savages, and idiots, they yield to natural appetites and passions, unrestrained and unreproached by any feeling of impropriety, although intellectually cognizant of the moral standards of society. Hence their remarkable *sang-froid*, and the superficial character of any apparent reformation or conversion. Dr. Thomson, resident surgeon to the General Prison for Scotland, at Perth, finds his experience confirmatory of the views of Despine, and, in a paper published in the *Journal of Mental Science* for October, 1870, recognizes various degrees of "moral insensibility."

A MATCH UNDER THE MICROSCOPE.—Those who are fond of investigations with the microscope will find a beautiful object in the head of an ordinary parlor-match. Strike the match, and blow it out as soon as the head has fused sufficiently to cause protuberances to form on it; on that part of the head which took fire first will be found a white, spongy formation, which, under the microscope and with a bright sunlight on it, has the appearance of diamonds, crystals, snow, frost, ice, silver, and jet, no two matches giving the same combination or arrangement.—*Scientific American*.

THE PRINCE OF BAVARIA.—The Prince of Bavaria, whose sister married the Crown-Prince Rudolph of Austria, has, it is stated, adopted medicine as his profession. By all accounts he will be a very successful practitioner, for he has not only received a diploma, but he has within the last few days performed a most difficult operation at the Munich Ophthalmic Hospital.—*Boston Medical and Surgical Journal*.

WE DESIRE TO CALL ATTENTION to the Medical Charts of the Case Record Company, as a means of facilitating accurate note-keeping; the prices are, five cents each, fifty cents per dozen, three dollars per hundred.

ON THE 3D OF MARCH the first stone of the Anatomical School of the new Faculty of Geneva was laid with great pomp.

THE CROSS OF COMMANDER of the Norwegian Order of St. Olaf has been conferred on Professor Sigmund, of Vienna.

DR. G. L. CARIUS, professor of chemistry at Marburg, died on April 26, in the forty-sixth year of his age.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM JUNE 1, 1875, TO JUNE 7, 1875, INCLUSIVE.

RANDOLPH, JOHN F., SURGEON.—Relieved from duty at Camp Robinson, and assigned to duty at Fort D. A. Russell, Wyoming Territory. S. O. 64, Department of the Platte, May 29, 1875.

FRANTZ, J. H., SURGEON.—Assigned to duty as Post-Surgeon at Fort Preble, Maine. S. O. 105, Military Division of the Atlantic, May 16, 1875.

WEEDS, J. F., SURGEON.—Assigned to duty at Nashville, Tennessee, as Post-Surgeon. S. O. 71, Department of the South, June 2, 1875.

LORING, I. V., ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 38, Department of Arizona, May 18, 1875.

HARVEY, PHIL. F., ASSISTANT-SURGEON.—When relieved by Surgeon Frantz, assigned to duty at Fort Independence, Massachusetts. S. O. 105, c. s., Military Division of the Atlantic.

HOFF, JOHN V. R., ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 64, c. s., Department of the Platte.

ADAIR, G. W., ASSISTANT-SURGEON.—Relieved from duty at Ringgold Barracks, and to proceed to Fort Duncan, Texas, reporting upon arrival to Lieutenant-Colonel Shafter, for duty in the field. S. O. 106, Department of Texas, May 31, 1875.

SKINNER, J. O., ASSISTANT-SURGEON.—Relieved from duty in Department of the Columbia, and to report in person to the Commanding General, Department of the South, for assignment to duty. S. O. 111, A. G. O., June 4, 1875.

HAMILTON, JOHN B., ASSISTANT-SURGEON.—Assigned to duty at Fort Colville, Washington Territory. S. O. 64, Department of the Columbia, May 19, 1875.